

Cohort 2009 Five-Year Graduation Rates – State Results

The Massachusetts Department of Elementary and Secondary Education (ESE) calculates and reports graduation rates as part of overall efforts to improve educational outcomes for all students. In addition, reporting graduation rates is required under Title I of the federal No Child Left Behind Act.

The 2009 five-year cohort graduation rate is calculated as follows:

$$\frac{\text{\# of students in cohort (denominator) who graduate in 5 years or less}}{[\text{\# of 1st time entering 9th graders in 2005-06}] - \text{transfers out/deaths} + \text{transfers in}}$$

The 2009 five-year cohort graduation rate for Massachusetts public high schools was 84.0 percent which represented an increase of 2.5 percentage points from the four-year rate for the 2009 cohort. The 2009 five-year rate decreased by 0.2 percentage points when compared to the 2008 cohort five-year rate of 84.2.. This small decrease represented the first year of a decrease in the five-year rate since the ESE began to calculate cohort graduation rates.¹

All student subgroups had a higher 2009 five-year rate as compared to the 2009 four-year rate including students with limited English proficiency and Hispanic students achieving the largest gains of 5.8 and 4.9 percentage points respectively. While significant gaps in the graduation rates among different subgroups remain, the additional year did narrow the margin between the highest and lowest racial and ethnic groups (White and Hispanic) from 27.2 percentage points at the end of four years to 24.1 percentage points after five years.

Additional critical findings of the report include:

- African American males graduated at a rate that was 5.9 percentage points higher than their four-year rate and represented the largest increase of race/gender combination.
- Students with limited English proficiency increased their five-year rate by 5.8 percentage points as compared to their four-year rate.
- 26.5 percent of the students in the cohort who are still enrolled in a Massachusetts public school have earned their Competency Determination (CD) by reaching the proficiency threshold of the English Language Arts and Mathematics sections and the Needs Improvement threshold of the Science section of the Massachusetts Comprehensive Assessment System.
- 72 percent of school districts and 62 percent of high schools had a higher five-year graduation rate than the state average of 84.0 percent.

¹ The decrease in the five-year graduation rate for the 2009 cohort is partially attributable to a change in the Competency Determination standards for all 2010 graduates. The new standard included reaching the proficiency threshold of the English Language Arts and Mathematics sections and the Needs Improvement threshold of the Science section of the Massachusetts Comprehensive Assessment System. Additional information on the new standards can be found at <http://www.doe.mass.edu/lawsregs/603cmr30.html?section=03>.

The following tables and graphs further summarize the five-year results for the 2009 cohort. The results are based on data submitted by school districts through the Department's Student Information Management System.

Table 1. Graduation Results for All Students and Student Subgroups²

		Graduates		Non-Graduates³				
	2009 Cohort # ⁴	5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer ⁵	GED	Dropped Out	Expelled
All Students	77,038	84.0%	+2.5	1.9%	1.5%	3.0%	9.4%	0.1%
Female	37,656	86.4%	+1.8	1.5%	1.4%	2.7%	7.9%	0.0%
Male	39,382	81.7%	+3.1	2.4%	1.6%	3.3%	10.9%	0.1%
LEP ⁶	4,933	63.3%	+5.8	3.9%	7.0%	1.2%	24.5%	0.2%
Special Education	14,845	69.3%	+4.4	7.4%	3.6%	2.9%	16.8%	0.1%
Low Income	29,477	71.3%	+4.4	3.2%	2.9%	4.5%	18.0%	0.1%
African American	6,906	73.7%	+4.6	3.9%	3.5%	3.3%	15.5%	0.1%
Asian	3,612	89.1%	+3.0	1.6%	1.9%	1.5%	6.0%	0.1%
Hispanic	10,336	64.6%	+4.9	3.7%	3.7%	3.9%	23.9%	0.2%
Multi-race, Non-Hisp.	1,070	83.4%	+2.9	2.0%	1.4%	2.9%	10.2%	0.1%
Native American	212	79.6%	+3.7	0.9%	1.4%	3.8%	14.2%	0.0%
Pacific Islander	72	76.4%	+7.0	6.9%	1.4%	4.2%	11.1%	0.0%
White	54,830	88.7%	+1.8	1.4%	0.8%	2.9%	6.2%	0.1%
Urban	26,829	71.3%	+4.2	3.4%	2.9%	4.5%	17.8%	0.1%

² Due to rounding, row percentages may not equal 100 percent.

³ In the reporting of aggregate results, students are included in the first column (from left to right) for which they qualify. For example, students who dropped out or were expelled, but earned a GED, are included in the GED category. Students are only reported in one category.

⁴ The cohort count is as of the end of 2008-09 school year. The status (e.g. graduate, enrolled) is updated as of October 1, 2010.

⁵ Non-Grad Completer includes 1) students who earned a certificate of attainment, 2) students who met local graduation requirements but the district does not offer certificates of attainment, and 3) students with special needs who reached the maximum age (22) but did not graduate.

⁶ The limited English proficient, special education, and low income subgroups include all students that were reported in those categories at least once in high school. Students can be counted in more than one group.

Table 2. Graduation Results for Race/Ethnicity Groups by Gender

	2009 Cohort #	Graduates		Non-Graduates				
		5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer	GED	Dropped Out	Expelled
African American Female	3,380	78.0%	+3.5	3.0%	3.1%	2.6%	13.3%	0.1%
African American Male	3,526	69.7%	+5.9	4.7%	3.9%	3.9%	17.6%	0.2%
Asian Female	1,735	90.5%	+2.1	1.2%	2.0%	1.2%	5.0%	0.0%
Asian Male	1,877	87.7%	+3.7	1.9%	1.7%	1.7%	6.8%	0.2%
Hispanic Female	5,057	69.3%	+4.5	2.6%	3.5%	3.7%	20.9%	0.1%
Hispanic Male	5,279	60.2%	+5.4	4.7%	3.9%	4.1%	26.7%	0.3%
Multi-race Female	557	85.6%	+1.9	1.1%	1.3%	3.1%	9.0%	0.0%
Multi-race Male	513	81.1%	+4.1	2.9%	1.6%	2.7%	11.5%	0.2%
Native American Female	116	83.6%	+1.7	0.9%	0.9%	3.4%	11.2%	0.0%
Native American Male	96	74.7%	+5.9	1.1%	2.1%	4.2%	17.9%	0.0%
Pacific Islander Female	32	75.0%	+3.1	3.1%	0.0%	6.3%	15.6%	0.0%
Pacific Islander Male	40	77.5%	+10.0	10.0%	2.5%	2.5%	7.5%	0.0%
White Female	26,779	90.5%	+1.1	1.1%	0.8%	2.6%	4.9%	0.0%
White Male	28,051	87.0%	+2.4	1.6%	0.9%	3.1%	7.3%	0.1%

Table 3. Graduation Results for Students Receiving Special Education Services by Gender

	2009 Cohort #	Graduates		Non-Graduates				
		5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer	GED	Dropped Out	Expelled
Special Ed. Female	5,452	70.7%	+3.5	7.1%	4.1%	3.1%	14.9%	0.0%
Special Ed. Male	9,393	68.5%	+5.0	7.5%	3.3%	2.8%	17.8%	0.1%

Table 4. Graduation Results for Limited English Proficient Students

		Graduates		Non-Graduates				
	2009 Cohort #	5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer	GED	Dropped Out	Expelled
LEP Female	2,348	67.1%	+5.6	3.2%	7.1%	1.0%	21.7%	0.0%
LEP Male	2,585	59.8%	+5.9	4.5%	6.8%	1.3%	27.2%	0.3%
LEP in Original Cohort	3,185	65.7%	+4.3	4.3%	4.4%	1.5%	23.9%	0.2%
LEP Entered Cohort after 10/1/05	1,748	58.8%	+8.3	3.1%	11.7%	0.5%	25.8%	0.1%

Table 5. Graduation Results for Race/Ethnicity by Limited English Proficient Status

		Graduates		Non-Graduates				
	2009 Cohort #	5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer	GED	Dropped Out	Expelled
African American LEP	889	72.1%	+5.5	4.6%	9.9%	0.1%	13.3%	0.1%
African American Non-LEP	6,017	74.0%	+4.6	3.8%	2.6%	3.7%	15.9%	0.1%
Asian LEP	823	80.1%	+7.0	2.6%	5.6%	0.7%	10.7%	0.4%
Asian Non-LEP	2,789	91.7%	+1.8	1.3%	0.8%	1.7%	4.6%	0.0%
Hispanic LEP	2,571	53.0%	+5.7	4.7%	7.1%	1.5%	33.6%	0.2%
Hispanic Non-LEP	7,765	68.5%	+4.6	3.3%	2.6%	4.7%	20.7%	0.2%
Multi-race LEP	27	63.0%	+7.4	0.0%	11.1%	0.0%	25.9%	0.0%
Multi-race Non-LEP	1,043	84.0%	+2.9	2.0%	1.2%	3.0%	9.8%	0.1%
Native American LEP	8	62.5%	+0.0	0.0%	0.0%	0.0%	37.5%	0.0%
Native American Non-LEP	204	80.3%	+3.8	1.0%	1.5%	3.9%	13.3%	0.0%
Pacific-Islander LEP	7	57.1%	+14.2	0.0%	14.3%	0.0%	28.6%	0.0%
Pacific Islander Non-LEP	65	78.5%	+6.2	7.7%	0.0%	4.6%	9.2%	0.0%
White LEP	608	71.3%	+4.9	1.3%	3.9%	1.8%	21.7%	0.0%
White Non-LEP	54,222	88.9%	+1.7	1.4%	0.8%	2.9%	6.0%	0.1%

Table 6. Graduation Results for Non-Mobile and Mobile Students⁷

High Schools Attended	2009 Cohort #	Graduates		Non-Graduates				
		5-Year Rate	2009 4-Yr Difference	Still in School	Non-Grad Completer	GED	Dropped Out	Expelled
One School	65,791	87.8%	+1.9	1.2%	1.2%	2.3%	7.5%	0.1%
Two Schools	8,771	67.9%	+5.5	3.2%	2.8%	6.9%	19.1%	0.1%
Three Schools	1,348	50.5%	+10.7	5.9%	3.3%	10.1%	29.9%	0.2%
Four or More Schools	1,128	38.9%	+14.0	10.8%	6.9%	11.1%	31.9%	0.3%

Table 7. Competency Determination (CD) Status for Select Non-Graduate Groups

	Still in School			Dropped Out		
	Number	CD	No CD	Number	CD	No CD
All Students	1,481	26.5%	73.5%	7,278	21.2%	78.8%
Female	547	23.9%	76.1%	2,988	21.6%	78.4%
Male	934	27.9%	72.1%	4,290	21.0%	79.0%
LEP	191	28.8%	71.2%	1,214	9.6%	90.4%
Special Education	1,092	14.0%	86.0%	2,488	16.5%	83.5%
Low Income	938	32.9%	67.1%	5,296	18.9%	81.1%
African American	267	25.8%	74.2%	1,073	17.1%	82.9%
Asian	57	24.6%	75.4%	215	24.2%	75.8%
Hispanic	379	35.4%	64.6%	2,471	14.1%	85.9%
Multi-race, Non-Hisp.	21	23.8%	76.2%	109	21.1%	78.9%
Native American	Less than 6			30	13.3%	86.7%
Pacific Islander	Less than 6			8	12.5%	87.5%
White	750	22.5%	77.5%	3,372	27.7%	72.3%

⁷ Mobility refers to the number of different high schools that the student attended within the Commonwealth. Students who never moved or moved in from another state or a private school and attended one public high school in Massachusetts are represented in the “One School” row.

Table 8. Distribution of Graduation Rates in the Aggregate for Districts⁸

2009 Five-Year Graduation Rate	Number of Districts	Percentage of Districts
< 50%	5	1.7
50 - <60%	8	2.8
60 - <70%	10	3.5
70 - <80%	27	9.4
80 - <85%	39	13.6
85 - <90%	51	17.8
90 - <95%	80	28.0
95 – 100%	66	23.1
Total	286	100

Table 9. Distribution of Graduation Rates in the Aggregate for Schools⁹

2009 Five-Year Graduation Rate	Number of Schools	Percentage of Schools
< 50%	37	10.1
50 - <60%	13	3.6
60 - <70%	20	5.5
70 - <80%	33	9.0
80 - <85%	44	12.1
85 - <90%	48	13.2
90 - <95%	86	23.6
95 – 100%	84	23.0
Total	365	100

⁸ Includes districts with at least six students in the cohort. District analyses include charter schools, regional school districts and vocational/technical high schools.

⁹ Includes schools with at least six students in the cohort